DOCUMENT RESUME

ED 162 949 SO 011 348

AUTHOR Levin, Henry M.
TITLE Equal Educational Opportunity in Western Europe: A Contradictory Relation.
PUB DATE Sep 76
NOTE 66p.; Paper presented at Annual Meeting of the American Political Science Association (Chicago, Illinois, September 4, 1976)

EDRS PRICE MF-$0.83 HC-$3.50 Plus Postage.
DESCRIPTORS Access to Education; *Comparative Education; Developed Nations; *Economic Opportunities; *Educational Opportunities; Educational Trends; Elementary Secondary Education; *Employment Opportunities; Employment Patterns; Employment Problems; Employment Trends; *Equal Education; Higher Education; Job Market; Social Factors; Social Mobility; Underemployed; Unemployment
IDENTIFIERS *Europe (West)

ABSTRACT

Based on four standards of measurement, it appears that the educational systems of Western Europe fail to provide a significant equalizing influence. The four criteria are: (1) equality of educational access, (2) equality of educational participation, (3) equality of educational results, (4) and equality of educational effects on life chances. Although the distribution of education shows a universal trend toward increasing equality of educational attainments, data indicate that persons from lower social class backgrounds are likely to follow less prestigious and remunerative courses of study. Moreover, they lack the social or political connections to obtain better jobs. This pattern is a result of the perceived role of schooling, which is to prepare students for filling the needs of capitalistic wage-labor. There is a basic contradiction between this function and that of increasing social mobility. Moreover, the post World War II reduction in economic growth has created an educated, underemployed proletariat. The increasing disjuncture between the values and expectations of the educated worker and the realities of work is creating a new working class of revolutionary youth. Educational reforms must include increasing the selectivity of universities, absorbing enrollment increases through alternative higher education, developing an alternative educational pattern, and emphasizing career education. Work reforms call for changing the organization of work, increasing the prestige of blue collar work, and providing more jobs in the public sector. (KC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

DEC 27 1978

SO

ED162949

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Henry M. Levin

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

EQUAL EDUCATIONAL OPPORTUNITY IN WESTERN EUROPE: A CONTRADICTORY RELATION

by

Henry M. Levin

Stanford University and
Center for Economic Studies

September 1976

Prepared for the Annual Meetings of the American Political Science Association, Chicago, Illinois, September 4, 1976. The author is presently a Fellow at the Center for Advanced Study in the Behavioral Sciences, and he wishes to thank the Center for the use of its excellent facilities as well as Agnes Page and Anna Tower for typing the manuscript. Research support for the author's work in Western Europe was received from the Spencer Foundation under its grant to Stanford University on "Education and the Distribution of Income" and from the National Institute of Education under its grant to the Center for Economic Studies on "The Educational Requirements for Industrial Democracy."

SO-011348

H. M. Levin
August 1976

Equality of Educational Opportunity in Western Europe

I -- INTRODUCTION

The role of education in creating a just and productive society is very much a topic of controversy today. On the one side are those who see the educational system as that institution of modern society which develops, sorts, and selects persons according to their productive proficiencies to fill the hierarchical positions of modern, large-scale bureaucratic organizations in a rational and meritocratic manner (Inkeles 1975; Bell 1973). These spokesmen also believe that the schools are the most important socialization influence in preparing men for modern institutions, generally (Inkeles and Smith 1974). On the other side are those who see the schools as agencies for reproducing the social relations of production for monopoly capitalism and its supportive state structures (Bowles and Gintis 1976; Althusser 1971). In their view the schools serve the role of preparing wage-labor for capitalist enterprise with its attendant needs for docile and disciplined workers who are socialized and certified for particular places in the work hierarchy with an awareness only of their individual relations to the enterprise rather than of solidarity with other workers as a class.

Both groups probably agree with the description by Bowles:

> The school is a bureaucratic order with hierarchical authority, rule-orientation, stratification of 'ability' (tracking) as well as by age, role differentiation by sex (physical education, home economics, shop) and a system of external incentives (marks, promise of promotion and threat of failure) much like pay and status in the sphere of work (Bowles 1973:352).

But the former group interpret this function of the schools as necessary for preparing the young for modern, large-scale production and its technological relations, while the latter group views this preparation as an essential ingredient for the domination of capitalist enterprise over a fragmented work force that is socialized to work in behalf of profits and capital accumulation for a ruling class while remaining unaware of the inherent exploitation as well as its own potential class power in overthrowing the process (Bowles and Gintis 1976). While other important versions of the role of the school exist (Jencks 1972; Illich 1970), the poles of the present debate are represented by the functionalists who see schooling as the essential institution for preparing competent members of a modern, rational, efficient, and meritocratic society and the Marxists who see schooling as one of the most important instruments of the state for supporting the capitalist hegemony over the worker.

It is very clear that the popular rhetoric and ideology of modern governments in the United States, Western Europe, and much of the rest of the world is predominantly sympathetic with the meritocratic vision. Throughout the world constitutions, laws, and declarations of human rights declare a national commitment to equality of opportunity (igualdad de oportunidad, égalité des chances, Chancengleichheit), and invariably this notion is further reduced to equality of educational opportunity. To the degree that philosophers are cited on the relation between education and equal opportunity, they are the ubiquitous and optimistic quotes of

persons such as Horace Mann (Cremin 1957) and John Dewey (1916) rather than those who saw education as a means of creating a modern, industrially based set of inequalities to replace the traditional unequal, social structure. Typically, a discussion of equality of opportunity begins with the quote by Mann: "Education...prevents being poor (A. Mann 1968:13)". But just to remind us that not all visions of the role of schools were ones of equality, it is useful to cite T. Malthus and his advocacy of a national system of schooling in his famous essay on population, written in 1798:

> The establishment of a more extensive system of national education has neither the advantage of novelty with some, nor its disadvantages with others, to recommend it. The practical good effects of education have long been experienced in Scotland; and almost every person who has been placed in a situation to judge, has given his testimony that education appears to have a considerable effect in the prevention of crimes, and the promotion of industry, morality, and regular conduct....
>
> Among the higher and middle classes of society, the effect of this knowledge will, I hope, be to direct without relaxing their efforts in bettering the condition of the poor; to show them what they can what they cannot do; and that, although much may be done by advice and instruction, by encouraging habits of prudence and cleanliness, by discriminate charity, and by any mode of bettering the present condition of the poor which is followed by an increase of the preventive check; yet that, without this last effect, all the former efforts would be futile and that, in any old and well-peopled state, to assist the poor in such a manner as to enable them to marry as early as they please, and rear up large families, is a physical impossibility. This knowledge, by tending to prevent the rich from destroying the good effects of their own exertions, and wasting their efforts in a direction where success is unattainable, would confine their attention to the proper objects, and thus enable them to do more good.
>
> Among the poor themselves, its effects would be still more important. That the principal and most permanent cause of poverty has little or no <u>direct</u> relation to forms of government, or the unequal division of property; and that, as the rich do not in reality possess the <u>power</u> of finding employment and maintenance for the poor, the poor cannot, in the nature of things, possess the <u>right</u> to demand them; are important truths flowing from the principle of population, which, when properly explained, would by no means be above the most ordinary comprehensions.

> And it is evident that every man in the lower classes of society who became acquainted with these truths, would be disposed to bear the distresses in which he might be involved with more patience; would feel less discontent and irritation at the government and the higher classes of society, on account of his poverty; and would be on all occasions less disposed to insubordination and turbulence; and if he received assistance, either from any public institution or from the hand of private charity, he would receive it with more thankfulness, and more justly appreciate its value (emphasis in original, T. R. Malthus 1960: pp. 590-592).

That the words of Malthus on advocating a national system of education have all but been forgotten and those of Horace Mann and John Dewey are cited again and again might very well be a "wish-fulfillment" on our part in that it is certainly more comforting for us to think of schools as the agents of justice and development of human potential than as agents for preparing the young for the inequalities of the productive structure and of life itself. In this paper I will attempt a review of the equality of educational opportunity perspective for Western Europe. In principle, this is a formidable task which should occupy several volumes. First, the meaning of the term equality of educational opportunity requires both philosophical and operational analysis. Second, the collection and analysis of data for well over a dozen countries is a herculean undertaking in itself. Finally, the interpretation of data necessitates an extensive discussion of competing hypotheses on the relations between the distribution of educational attainments and the distributions of income and other outcomes as well as an effective integration of this discussion with the data analysis.

The goals of this paper are far more modest. First, we will suggest some standards for considering equality of educational opportunity. Second, we will attempt to ascertain what existing data tell us about the attainment of these standards. Finally, we will summarize our findings and their

consequences. Although we are handicapped severely in attempting to summarize a complex phenomenon for a large number of countries rather than concentrating on a single nation in much greater detail, we are also aided by the extensive work on this subject of T. Husen (1972, 1974 and 1975), Boudon (1973), Anderson (1961), Bourdieu (1966), Glass (1954), and Miller (1960 and 1975) as well as the very substantial data resources of the Organization for European Cooperation and Development (OECD) and its recent two volume work on Education, Inequality and Life Chances (1975). However, the number of countries and potential aspects that could be treated is so great relative to that which can be covered within the scope of this paper, that the presentation will necessarily lack the depth required for a complete analysis of any specific phenomenon or country. Accordingly, we have attempted to provide abundant references to source materials for those readers who are inspired to pursue a more intensive investigation.

II -- STANDARDS AND MEASURES FOR ASSESSING EQUALITY OF EDUCATIONAL OPPORTUNITY

One of the major reasons that there is so much disagreement and misunderstanding about whether equality of educational opportunity exists or is improving or deteriorating is the fact that many different tacit standards are imposed on the use of this equality criterion.[1] In general, there have been four classes of criteria that have been used to examine this issue: (1) equal access to the educational system; (2) equal participation in the educational system; (3) equal educational results; and (4) equal educational effects on life chances. Coleman (1968) has argued that the different interpretations have risen as a result of historical evolution where initially the focus was only on the preparation of persons to have opportunities in

the expanding industrial or modern sector of the society; but the failure of this standard to provide more equal results by race and social class has created a progressive legal and social transformation of the standard toward equality of life outcomes.

Before reviewing the nature of the different criteria, it is important to note an important assumption that underlies all of them. They presume that relatively large inequalities in capitalist societies are inevitable by the nature of production with its emphasis on the hierarchical division of labor as well as by the requirements for attracting scarce talent into their most socially productive endeavors. That such inequalities are intrinsic to the capitalist system is beyond question. As one of the leading spokesman for the so-called economic liberal view has asserted: "...a capitalist system involving payment in accordance with product can be, and in practice is, characterized by considerable inequality of income and wealth (Friedman 1962:168). The issue of equality of educational opportunity is then based upon the degree to which the educational system can develop and identify talents which can then be allocated to the productive hierarchy through a system of labor markets where each worker will receive a reward commensurate with his contribution to output. Of course, all of this is based upon a nineteenth century version of laissez-faire capitalism where the competition of the marketplace prevails, and it ignores the historic tendency towards monopoly capitalism where relatively few economic entities dominate the markets for products, services, and purchase of factors of production with the tacit or explicit support of the State (Baran and Sweezy 1966; Edwards, Reich, and Weisskopf 1972; Poulantzas 1973).

So, equality of educational opportunity is viewed essentially as a

version of social mobility where the educational system will keep access open to positions in the productive hierarchy by assuring that all talent will be developed and identified and allocated according to merit rather than criteria of social origin, sex, race, or other "irrational" bases. As a result, none of the different definitions of equality of educational opportunity are premised on eliminating inequalities, although some suggest a reduction in inequalities as the productivities of persons at the lower end of the spectrum are raised to a greater extent than those at the upper end. Instead the concept of equality of educational opportunity in a capitalist society refers to reducing or eliminating the connection between the social circumstances of birth and those of adulthood by making access to the existing inequalities a strict function of merit rather than social status, family ties, and so on (Miller 1975). Of course, such a goal must necessarily assume that merit is not intrinsically a function of class or social origin as has been suggested by some of the recent literature on the "hereditary meritocracy," of IQ (Young 1958; Jensen 1969; Hernnstein 1963). In this context, both the heritability and productive significance of such measures as IQ have been strongly challenged (Kamin 1974; Bowles and Gintis 1976; Chap. 4). But, virtually all of the views have presumed that equality of educational opportunity is attained when representative members of different races, sexes, and social origins have the same choice of occupational positions, work roles, incomes, and other adult alternatives.

Summarizing economic historian R. H. Tawney, this conception meant:

> If extreme inequality was the final consequence, that result merely meant that men's capacities were unequal. Instead of the class into which he was born determining, as in the past, the position of the

> individual, the quality of the individual determined his position, and therefore his class. Refined and sublimated by the wholesome acid of free competition, the word "class" itself was purged of the invidious associations which formerly had clung to it.... A society marked by sharp disparities of wealth and power might properly, nevertheless, be described as classless, since it was open to each man to become wealthy and powerful (Tawney 1931:137-138).

(1) Equal Access to the Educational System

The simplest standard of equal educational opportunity addresses itself to equality of access to the educational system. Coleman has suggested that this notion is based upon: "providing a free education up to a given level which constituted the principal entry point to the labor force; providing a common curriculum for all children, regardless of background; and providing that children from diverse backgrounds attend the same school (Coleman 1968:11). Presumably, the principal of equal access is satisfied through the provision of educational facilities of a similar nature for all students at least up to the age of labor market entry. At that age further participation would be based upon previous performance as well as occupational intent. Thus, even if the higher levels of education were more restrictive, they could still be equally accessible to students with similar academic performances and intentions. Of course, such a standard presumes that there are no social class-related factors which might inhibit the performance of students from lower class origins or prevent such children from taking advantage of educational offerings.

In examining the standard of equal access to education, it is important to note the structure of Western European education. Bearing in mind the dangers in generalizing for some twenty countries, it is still accurate to

describe virtually all of the countries operating what Husen (1975:109-112) has called a "dual system" consisting of a public and free system of primary education for all children up to age 12-14 or so and a selective system of secondary schools that would prepare students who continued for lower level careers among vocational schools or for entrance to the university for the academic ones (gymnasium or lycee). Of course, a large number of students have not continued beyond the compulsory schooling period. In recent years there have been attempts to provide comprehensive secondary schools that would encompass both vocational and academic studies as well as to increase the mandatory period of attendance to provide some secondary schooling for all youngsters.

Table One shows the compulsory schooling ages and proportions of the population age 7-14 who are attending schools for the European members of the OECD as well as for the United States. In several of the tables that follow, the U. S. data will be shown for purposes of comparison. For most of the countries the compulsory schooling period begins at the age of 6 or 7 and extends until the age of 14-16. Bearing in mind that the data should be considered as only rough indicators rather than precise measures because of the differences from country to country in measurement and accounting methods, it appears that virtually all countries have been largely successful in enrolling the preponderant portions of their 7-14 age groups. In general, the Mediterranean countries (with the exception of France) are the only ones that have not shown almost complete schooling coverage among 7-14 year olds in recent years.

This is not to say that schooling opportunities are identical for all

	Compulsory Schooling Ages 1974		Fulltime Students as Percentage of Population 7 - 14 Years of Age	
	Begins at Age	Terminates at Age	Year	%
Austria	6	15	1969	99.8
Belgium	6	14	1966	98.0
Denmark	7	15-16	1970	98.1
Finland	7	16	1967	99.0
France	6	16	1970	98.6
Germany (W.)	6	15	1969	98.0
Greece	5-1/2	11-1/2	1969	90.7
Iceland	7	15	1970	97.4
Ireland	6	15	1971	97.0
Italy	6	14	1966	87.3
Luxembourg	6	15	1970	93.8
Netherlands	6	15	1970	99.0
Norway	7	16	1970	99.0
Portugal	6	14	1970	89.0
Spain	6	14	1970	90.2
Sweden	7	16	1972	99.2
Switzerland	6-7	14-16	1970	96.7
Turkey	7	12	1968	76.4
U.K.	5	16	1970	98.5
Yugoslavia	7	15	1968	85.9
U.S.A.	7	16	1970	99.0

Table One -- Compulsory Schooling Ages of Western European Countries and U.S., 1974, and Fulltime Students as Proportion of Population, Age 7-14.

Source -- OECD, Educational Statistics Yearbook, Vol. 1 (1974), pp. 12 & 28.

children. The national systems differ from the highly centralized French educational system to the much more decentralized ones of West Germany and the United Kingdom. It is said that the French schools are said to be so highly centralized that at any time of the day the French minister of education can turn to the appropriate page of the appropriate textbook and know that across the nation in both cities and hamlets, all children in a particular grade are reciting the first paragraph or working on multiplication or carrying out whichever task is prescribed for that page. But, even in such a highly centralized system there are likely to be differences in the types of teachers that one can attract to Paris and the major cities on the one hand and to the rural provinces on the other as well as in the social class orientations of schools (Rist 1970). Accordingly, the high enrollments at the lowest educational levels do not guarantee that all children are receiving the same education or the same opportunities to continue beyond the post-compulsory period.[2]

Up until quite recently, movement into the secondary phase required passing an examination or fulfilling some other type of selection procedure in most Western European countries.[3] Thus, a very early examination, sometimes as early as at 10 years of age, would determine the educational future, and by implication, the occupational future of each child. Various structural reforms in countries like England, France, Belgium, Germany, Sweden, and other nations have modified this pattern by setting out comprehensive secondary schools in which -- in theory -- students would have a choice of curricula with the ultimate selection of specialization based upon actual attainments in the secondary school. It is believed that such reforms would give youngsters a longer period and greater choices with which to

develop their talents as well as eliminating the social stratification that is so obvious in the early selection and separation of the academic versus nonacademic student. Whether these reforms have been successful in achieving these goals is problematic, and it is probably too early to be sure since in many cases the transition to comprehensive schools is proceeding slowly. It is interesting to note that Husen (1973) has found that the top students in countries with comprehensive educational systems perform about as well as comparable student populations in countries with very selective ones.[4]

Table Two shows the full-time enrollment rates for children 15-18 for the OECD European countries. Clearly, there are drastic reductions in the proportions of children who continue beyong the compulsory period. During the period surveyed, relatively few countries showed as many as even half of their 15-18 year olds in school. Of course, this finding is not necessarily inconsistent with the equality of access standard if the reductions in participation are based purely on "merit" rather than on factors of social class, sex, or race. This is a matter that we will look into when we review the second standard, equality of educational participation.

Again, the policies for admission to post-secondary educational opportunities vary from country to country. But, in general, they have operated as follows. Graduates of the academic secondary schools or general secondary schools have been admitted directly to the university, although some countries have required entrance examinations as well. (Pellegrin 1974). Examinations have also been required for the most

Percent of Population at Each Age Enrolled at Beginning of Academic Year

	Year	Age 15	16	17	18	15-18
Austria	1969	54.8	32.6	23.6	16.4	31.9
Belgium	1966	75.1	61.3	47.0	33.2	54.2
Denmark	1970	85.2	66.8	31.8	23.2	51.7
Finland	1967	(59.2)	51.9	43.5	35.2	47.4
France	1970	80.5	62.6	45.1	29.1	54.3
Germany (W.)	1969	54.9	30.8	20.4	15.7	30.5
Greece	1969	56.8	49.1	45.8	26.1	44.7
Iceland			No data			
Ireland	1971	70.7	55.1	39.4	20.6	47.0
Italy	1966	42.1	33.6	27.4	20.2	30.8
Luxembourg	1970	56.6	40.5	30.2	22.4	37.4
Netherlands	1970	79.7	60.6	41.5	28.4	52.5
Norway	1970	94.2	74.6	59.8	46.5	68.9
Portugal	1970	30.1	25.4	22.0	20.4	24.5
Spain	1970	35.0	29.6	22.8	19.0	26.7
Sweden	1972	96.7	74.0	60.8	40.8	68.1
Switzerland	1970	95.9	66.7	54.8	32.8	62.6
Turkey	1968		No data			(21.1)
U.K.	1970	73.0	41.5	26.2	17.6	39.4
Yugoslavia	1968		No data			(36.6)
U.S.A.	1970	97.7	93.5	86.2	53.8	82.9

Source: OECD, Educational Statistics Yearbook, Vol. 1 (1974), p. 29. Figures in parentheses are estimates.

Table Two -- Fulltime Enrollment Rates for Children, 15-18.

selective institutions and/or the most selective careers of study within universities. Graduates of the nongeneral or academic secondary schools have traditionally been eligible only for entrance to so-called "short-cycle" higher education oriented towards preparation for a specific career (Pellegrin 1974). In recent years these distinctions have begun to erode with the admission of the latter to the university by special examination or by other procedures, but it has been argued that the change in procedures has been more theoretical than actual (Pellegrin 1974:89). Particularly, since the student movements of 1968, there has been pressure with at least some success in expanding university enrollments in the European universities to encompass a larger variety of backgrounds.

Table Three shows the estimate of annual entry to higher education of all types as a percentage of the relevant age group in 1970. In most cases less than one-quarter of the appropriate age group was entering higher education in comparison with almost half of the relevant population in the U.S. Since 1970 these figures have probably risen substantially, but comparative data are not readily available.

Thus far we have seen that the educational systems of Western Europe are characterized by almost complete enrollments of youngsters during the compulsory schooling period; about half of the appropriate age group during the noncompulsory secondary schooling phase; and about one-quarter of the relevant age group entering the post-secondary educational cycle. Of course, there are large variances from country-to-country. Whether this pattern is consistent with the equal access standard is not ascertainable

	Estimated Ratio of New Entrants to Appropriate Population (percentage)
Austria	16.0
Belgium	(28.5)
Denmark	26.0
Finland	18.3
France	(22.4)
Germany (W.)	15.8
Italy	24.1
Netherlands	18.3
Norway	27.5
Portugal	(6.6)
Spain	(18.1)
Sweden	(37.6)
Turkey	5.1
U.K.	20.6
Yugoslavia	29.1
U.S.A.	46.5

Table Three -- Annual Entry to Higher Education as a Percentage of Relevant Age Group in 1970.

Source: OECD, Educational Statistics Yearbook, Vol. 1 (1974), p. 40. Figures in parentheses are estimates.

from these data, but there is good reason to believe that children from lower social class origins are less able to take advantage of "equal accessibility" provisions than are children from higher social class backgrounds. Differences in family income, class culture, social reinforcement, and other factors are likely to differ so substantially, that Tawney has viewed such a conception of equality of educational opportunity as a "fraud" much like "...the impertinent courtesy of an invitation offered to unwelcome guests, in the certainty that circumstances will prevent them from accepting." (Cited in Husen 1975:38.) In fact, the class-related inequalities in educational experiences and outcomes have suggested that the examination of ex-post results rather than ex-ante provisions are a more useful approach to examining equality of educational opportunity (Coleman 1968).

(2) Equality of Educational Participation

One measure of educational results is that of the actual educational participation among groups drawn from different social origins, while another is the equality of educational results in terms of what is accomplished in the educational system. Equal educational participation is viewed as the equal probability of representative persons from different social origins achieving the same amount of educational participation in both a qualitative and quantitative sense. It is this standard that will be reviewed here, while the concept of equality of educational results will be consisered subsequently.

There are two types of barriers which can operate to reduce the educational participation of children from lower class origins relative to those from higher ones. These are (1) barriers external to the school and

(2) those within the school structure. The former include such factors as family expectations and limited income where the lower class family may have lower expectations for its children with respect to education, and limited income restricts the provision of funds for books, clothing, tuition charges for special courses or for examination preparation as well as making it more necessary for youngsters to provide financial support for the family. In addition, the intellectual stimulation that reinforces the schooling experience is less likely to be present in the family from lower social origins than in their more highly educated and wealthier counterparts. These factors have been reviewed elsewhere (Husen 1975: Chap. 6; Levin 1973), and they represent a prime base for Tawney's skepticism: "As though opportunities for talent to rise could be equalized in a society where the circumstances surrounding it from birth are themselves unequal (Tawney 1931:142).

The second type of barrier is that created by the structure and operations of the educational system itself. In an excellent discussion of these obstacles, Husen (1975) divides them into four classes:

(1) In the selection of students for academic secondary education or for institutions of higher learning.

(2) In the screening in terms of grade-repeating and drop-out that takes place during a given stage.

(3) In grouping practices, such as "streaming" or "tracking" that tend to bias against students with a particular background.

(4) In curriculum practices that prevent the promotion of certain types of talent or students with certain backgrounds (Husen 1975:119).

To these one might add the systematic differences in educational resources

that one might find between schools enrolling students of different social classes such that better teachers, facilities, and other educational resources are available to children from higher social class origins. Since Husen reviews (1975: Chap. 5) such barriers in both a theoretical and empirical context, we will not discuss them further other than to mention that both educational structures and social class influences that are external to the school appear to systematically induce higher educational participation among persons of higher social classes.

Reviews of studies of educational participation for Britain, West Germany, France, Holland, Denmark, and Sweden show a direct relation between such measures of social class origin as father's occupation and the amount of and type of education that a student receives (Husen 1975: Chap. 4). Extensive recent studies on the subject for Britain (Halsey 1975), Spain (Diez, et al., 1975), Germany (Pfaff and Fuchs 1975), and France (Boudon 1973; Eicher and Mingat 1975), Fägerlind (1973) and Holland (Peschar 1975) are consistent with these reviews as well as with such earlier studies as those of Glass (1954) and Floud (1956). All of these investigations suggest that the advantages bestowed upon a person by social class origin or sex are important determinants of how much education as well as the type of education received by a person. Moreover, even when one removes the effect of measured intellectual differences -- which in themselves are partly a result of social class influences -- the participation rates of persons with similar academic ratings are lower for persons from working class families than from middle class or upper class ones.

A summary of inequalities in participation is found in Table four

which shows estimates of relative chances of students from different social class origins in gaining access to higher education. The lack of availability of a uniform data set among countries suggests caution in making precise inter-country comparisons, although large differences among countries are probably indicative of large underlying differences in access. On the basis of these estimates it appears that it was about five times as likely for an upper class youth as a lower class one to enter the higher educational segment in relatively egalitarian Yugoslavia in 1960, while in Portugal the likelihood was 125:1. Between these two extremes are a wide range of ratios, but the overall interpretation is that a child of a professional or manager had an overwhelmingly greater probability of reaching the higher educational level than did the child of a worker, even in such countries that are known for their attempts at improving educational equity such as Sweden which showed a 26:1 ratio in favor of the more advantaged youth.

Table four also shows more recent data on these ratios for the countries and years for which such information was available. In most cases the probability of access of youth from lower social origins has improved in comparison with their more advantaged counterparts, and in some cases the improvements are rather drastic. Of course, the relative disadvantage of the lower class person in gaining access to higher education is still rather large according to these later data, and the "true" disadvantage is likely to be greater if one takes account of the qualitative differences in opportunities.

Just as the United States has expanded its higher educational offerings

Ratio of Chances of Access to Higher Education for Child from Working Class Background to One from Professional or Managerial Background.

	About 1960	Year	Later Period
Austria	51:1		n.a.
Belgium	7:1	1966	8:1
Denmark	9:1		n.a.
Finland	n.a.	1969	7:1
France	83:1	1968	18:1
Germany	41:1	1970	15:1
Greece	8:1	1970	3:1
Ireland	21:1		n.a.
Italy	36:1	1967	18:1
Luxembourg	72:1	1972	28:1
Netherlands	56:1	1970	27:1
Norway	7:1	1970	7:1
Portugal	125:1		n.a.
Spain	66:1	1970	25:1
Sweden	26:1		n.a.
Switzerland	20:1		n.a.
U.K.	8:1	1971	2:1
Yugoslavia	5:1	1969	3:1
U.S.	8:1	1969	3:1

Table Four -- Estimates of Ratio of Chances of Access to Higher Education for Child from Working Class Background Relative to One from Professional or Managerial Background[1]

Source: OECD, Education, Inequality, and Life Chances (Paris: OECD, 1975), p. 168.

[1]The lack of comparability among data available for different countries suggests great caution in intercountry comparisons. Reader should not cite these results without reviewing Ibid., pp. 176-181 for definitions and methodology.

primarily through the lower cost community colleges (Karabel 1972; Bowles & Gintis Chap. 8; Clark 1960), the countries of Western Europe have opened new institutions of a relatively less rigorous nature to absorb the increases of secondary school graduates who are seeking participation in higher education. Such expansion has taken place in new institutes as well as in correspondence and television universities such as the Open University in Great Britain. Even the expansion of such traditional universities as the University of Paris or Madrid in the post-1968 period has been characterized by enrollment increases that have far exceeded resource increases, with a resultant depreciation of the higher educational opportunities that are offered. That is, while a large portion of the children from upper class backgrounds are attending the most prestigious institutions and the most prestigious schools within those institutions, the absorption of the lower class student has occurred primarily through low cost expansion of traditional institutions or the establishment of lower cost, non-traditional alternatives (Pellegrin 1974:80-81).

In addition, to the summary data on participation in higher education by social class, information is also available on the relative participation of women. Table five shows female enrollments in higher education as a percentage of total enrollment in higher education are shown as well as the most prestigious component, university enrollments. Comparisons are shown for both categories for 1960,1965, and 1970. With the exception of Finland, Portugal, and perhaps France (for which we lack recent data), only about one-fifth to one-third of the students at this level are female. While some countries have made important gains toward a more equal level of participation between the sexes, others show a surprisingly static

	Total			University		
	1960	1965	1970	1960	1965	1970
Austria	23.9	24.3	28.6	23.1	23.9	24.8
Belgium	26.3	34.0	n.a.	19.2	25.7	n.a
Denmark	30.5	34.0	36.4	24.3	30.2	31.9
Finland	46.5	50.7	48.6	46.9	49.0	47.6
France	37.1	40.3	n.a.	39.7	41.4	n.a.
Germany	17.1	18.0	24.1	20.8	22.5	29.6
Greece	25.3	31.8	30.4	23.0	30.5	31.4
Ireland	n.a.	29.5	n.a.	n.a.	28.1	n.a.
Italy	26.8	32.9	38.5	26.2	32.5	38.3
Luxembourg	9.1	20.0	(30.3)	12.5	20.0	(30.5)
Netherlands	24.9	25.2	27.5	17.9	18.0	19.6
Norway	n.a.	39.2	37.6	n.a.	23.8	28.6
Portugal	29.5	37.5	44.7	31.0	40.2	47.9
Spain	n.a.	28.1	28.8	n.a.	21.1	26.4
Sweden	n.a.	n.a.	n.a.	33.5	n.a.	37.2
Turkey	19.9	22.0	19.7	17.4	22.8	19.9
U.K.	n.a.	30.2	34.0	n.a.	25.6	27.3
Yugoslavia	28.8	33.4	39.5	n.a.	29.5	37.0

Table Five -- Female Enrollment in Higher Education as Percentage of Total Enrollment in Higher Education.

Source: OECD, Educational Statistics Yearbook, Vol. 1 (1974), p. 24.

pattern with little or only a very modest improvement.

In summary, using the standard of equality of educational participation, all of the evidence suggests massive differences in equity in favor of youth drawn from higher social origins and males. While these differences seem to be diminishing over time, they are still rather substantial. Moreover, there is some reason to believe that much of the improvement in the educational attainments of youth from the lower social classes is deceptive in that it is qualitatively inferior to that of students from more advantaged backgrounds.

(3) Equality of Educational Results

A third standard that might be used to assess equality of educational opportunity is that representative members of each sex and social class obtain similar educational results from their educational development for each year of schooling and for their overall educational career. This standard suggests that it is not just the amount of education that is important, but its level of effectiveness in providing those skills, behaviors, and attitudes which will contribute to a productive adulthood. This was the concept behind the well-known Coleman Report in the U.S. (J. Coleman et al., 1966; J. Coleman 1967), and by 1968 Coleman asserted that "...effects of inputs have come to constitute the basis for assessment of school quality (and thus equality of opportunity)...(Coleman 1968: pp. 18-19)."

Of course, we should bear in mind the relation between the measure of educational effects and the measure of participation. Since many of the selection devices for both secondary and post-secondary education in Western

Europe are predicated heavily upon academic achievement, the student who shows better educational results is more likely to have the options to proceed further and to the most prestigious branches of the educational system. Thus, equality of participation and equality of educational results are closely intertwined.

While there may be many characteristics of educational development that might affect adult productivity, the only ones that have been assessed among countries are those of achievement test scores. The International Educational Education Association (IEA) under the leadership of Torsten Husen of the University of Stockholm has undertaken international studies of the determinants of achievement in mathematics, science, reading comprehension, civics, literature, and foreign languages (Husen 1967, Vols. I & II; Walker 1976; Passow et al., 1976; Purves 1973; Thorndike 1973; Comber and Keeves 1973). Several of the Western European countries were sampled for each of the subjects, and the pattern of results with respect to social class and achievement is fairly uniform.

In general, it was found that differences in the socio-economic background of the students as reflected by father's occupation and education, mother's education, books in the home, and family size were the most important factors that were statistically associated with achievement for all countries (Thorndike 1975). This pattern was similar for the Western European countries that were included in the sample, although there was variance from county to country (Thorndike 1975: 96).

Table Six shows the mathematics test scores for thirteen-year-olds in six Western European countries in 1965 by the occupation of the father.

	Father's Occupation					
	Manual Workers (except farming, fishing, and forestry)			Professionals, Executives, Administrators and High Technical Workers		
	Mean	Standard Deviation	Number in Sample	Mean	Standard Deviation	Number in Sample
Belgium	27.44	13.94	1,126	35.22	12.62	241
England	19.70	16.58	1,763	42.16	13.97	172
France	18.15	11.19	1,780	26.92	11.08	130
Germany	23.77	11.58	2,037	30.59	10.46	408
Netherlands	18.85	11.38	595	27.94	13.06	170
Scotland	20.21	14.86	3,583	32.18	15.08	460
Sweden	14.28	10.08	1,237	19.88	11.89	199
U.S.	14.98	11.90	3,033	26.83	13.79	875

Table Six -- Mathematics Test Scores for Thirteen-Year-Olds in Six Western European Countries and U.S., in 1965, by Father's Occupation.

Source: T. Husén (ed.), International Study of Achievement in Mathematics, Vol. II. (New York: John Wiley and Sons, 1967), p. 207. Data for Finland were excluded because of coding errors, Ibid., p. 16.

A comparison is made only between students whose fathers were in the highest occupational grouping (professionals, executives, high technical workers, and administrators) and the lowest one (manual workers except farming, fishing, and forestry). Among these countries the students from the higher social backgrounds showed average mathematics scores that were from one half of a standard deviation higher in the case of Sweden to two standard deviations higher in the case of England than their average counterpart from a working class background. Most of the differences were about eight-tenths of a standard deviation. Bear in mind that a difference of even a half of a standard deviation implies that the average student from the higher social class background had a higher test score than seventy percent of the persons from the lower class origin. A difference of one standard deviation implies that the average advantaged child in these samples was performing at or above eighty-four percent of the working class students.

Moreover, the more recent results for science, literature, reading, and civics cognitive achievement suggest also that the best predictor of test scores among Western European countries is the family and home background of the child (Walker 1975). This generalization is true not only across subjects, but it is also true among the age groups that were sampled, 10 year olds, 14 year olds, and students in the final year of secondary school. As one might expect, the statistical relation between achievement and family background is smaller among the students in the final year of secondary school where: "Most of those from the lower socioeconomic groups have dropped out unless they were especially competent. Thus, the selection has operated both to reduce the range of socioeconomic status and to leave in school a nonrepresentative fraction of children from the lower socioeconomic

strata (Thorndike 1975:98).

With respect to the relation between sex and achievement, women were found to do more poorly in science (Walker 1976:98-100) and in mathematics (Husen 1967, Vol. II: 233-250), and in cognitive civic achievement (Walker 1975:229). But, females appeared to be consistently stronger than males in literature achievement and slightly superior in reading comprehension (Walker 1975: 229). This mixed pattern suggests a different relationship between educational achievement and educational participation between the sexes than among representatives of different social classes where persons from lower social origins show both lower achievement and a lower likelihood of reaching secondary school or the post-secondary level.

(4) Equality of Educational Effects on Life Chances

The fourth standard that might be used to assess equality of educational opportunity is its effect on the life chances of persons from different social origins. The most complete application of this standard would be that it exists when the educational system intervenes in the social system in such a way that there is no systematic relation between a person's social origins (or sex) and his or her ultimate social attainments. That is, the educational system would compensate for differences in parental wealth, income, education, political power, social connections, culture, and so on so that these factors would not influence the chances of attaining a particular level of wealth, income, education, political power, and social connections for adult offspring. In the important work by Rawls (1971), this is called the principle of redress for "undeserved" inequalities such that:

> "...in order to treat all persons equally to provide genuine equality of opportunity, society must give more attention to those with fewer native assets and to those born into the less favorable social positions. The idea is to redress the bias of contingencies in the direction of equality." (100-101.)

Of course, education could have an equalizing effect on life outcomes without complete randomization between the social origins of parents and the adult attainments of offspring. If the existence of the educational system were to reduce the link between the status of parents and the ultimate attainments of their children, the equalization effect would be present; although its ability to overcome the other sources of unequal opportunity would obviously depend upon its strength rather than its mere existence. Finally, education would have a reinforcing or even an exacerbating effect on life chances if it simply served to reproduce the class structure from parent to child in each generation. In this case, education would not only fail to offset the inequalities of birth, but it would function on the basis of those inequalities along with other agencies of class transmission such as the family (Kohn 1969; Bowles and Gintis 1976; Althusser 1971).

On the basis of what information we do have, it appears reasonable to conclude that the overall thrust of the educational systems in Western Europe is not to break the tie between birth and life chances. The evidence for this is that on the average persons from lower social class backgrounds receive fewer years of schooling; schooling of lower quality; and poorer educational results for each year of schooling that is undertaken. Moreov• they are likely to be studying in less prestigious and remunerative career: if they reach the higher educational level, and they lack the social and

political connections to obtain the better jobs in a set of countries where the problem of unemployment and underemployment of graduates is becoming more and more serious as a result of the prodigious expansion of secondary and higher education. Let us consider each of these in turn.

As we documented in a previous section, children from more advantaged families are more likely to complete secondary and enter the higher the educational level. In some cases the differential probabilities between children from workers' families and those from professional families reaching higher educational attainments is greater than 25:1, and it is probably not less than 3:1, even considering improvement since the period of data which have been presented. In fact, it may be that more nearly current data will not change the picture. For example, a recent Swedish statistical report that analyzes the participation of students in higher education according to the occupation of fathers has found that the proportion of children from workers' families in Swedish higher education rose only until 1969-70 with virtually no change through 1972-73, the last year for which data were reported (Ministry of Education, Sweden 1976:24).

Second, much of the expansion of higher education that has absorbed the student from lower social class origins has been that of the short-cycle higher education which has been partially comparable to the community college of the U.S. (OECD, Short-Cycle Higher Education, 1973).[5] Both admission procedures and other factors will likely continue to promote this course of studies as the version of higher education that is allotted to the lower class student for giving him or her a "chance" at the higher level (Pellegrin 1974; 80-81; Bowles 1974; Karabel 1972; Clark 1960).

Interestingly, this is a much cheaper solution to the problem of providing education for lower social class youth, for not only would they undertake fewer years of study in the short-cycle, but the public cost is about one-third to one-half as much as the University for each student-year (OECD, Short-Cycle Higher Education 1973: 403).

Even when lower social class youth are able to gain access to the universities, they are likely to be in the less selective institutions and in the less selective and prestigious fields of studies (Pellegrin 1974: 81).[6] For example, while about 25 percent of male students in Swedish higher education in 1972-73 came from workers' families and 15 percent came from families where the father had an academic degree, the percentage of working class males studying law and medicine were 4.4 percent and 1.5 percent respectively with comparable figures for the higher social class group of 7.7 percent and 7.3 percent, respectively (Ministry of Education, Sweden 1976: 24 & 39). We should bear in mind that Sweden appears to have the most egalitarian educational system in Western Europe, so that data for other countries would probably show considerably more disparate participation by social class.

It is also interesting to note the rise of "new" universities to serve working class youth such as the Open University in Great Britain. While much can be said about the interesting and innovative approaches represented by such non-traditional alternatives, it is also clear that their clientele are those who would not be selected or could not participate in the more prestigious universities. Moreover, a principle advantage of them is said to be their relatively low cost per unit of instruction, a

factor which only seems to be important for institutions that serve lower class university enrollees rather than one which looms large at Oxford, Cambridge, and some of the red-bricks which serve a much more advantaged clientele (Lumsden and Ritchie 1975).

Further, there exists uncontested evidence of poorer measured cognitive achievement for each year of study for children from lower social class origins, and this factor also has operated to prevent such students from enrolling in the more prestigious institutions or courses of study (Pellegrin 1974). Finally, in labor markets that are becoming flooded with secondary and university graduates as a result of the recent expansions, youth from more disadvantaged backgrounds are severely handicapped in finding employment comparable with their more advantaged counterparts. Average annual growth rates of enrollment in higher education have been in the 5-12 percent range in Western Europe, while economic growth rates have been less than half of these (OECD, Educational Statistics Yearbook, Vol 1, 1974:32). The present reforms in secondary education guarantee a continued expansion of higher education that will vastly exceed the economic growth rates for the foreseeable future. While good data are lacking on this problem for recent years, there is widespread agreement that unemployment and underemployment of educated persons is a very serious problem and will probably become even more aggravated in the future (International Labour Organisation 1976: 50-52).

Unfortunately, good information on this phenomenon are not yet as well available because of the recency of the educational expansion and perhaps because governments have little zeal for revealing the details of a rather somber situation, although some data are beginning to emerge (ILO 1976:

50-52; Levy-Garboua 1975; Esnault and Le Pas 1974). But what is important is that in the race for jobs, the graduates from the lower social classes are likely to do even more poorly than the average graduate. Not only are such students likely to be less-well prepared, to be found in less prestigious fields, and to receive their training in less prestigious institutions, but they also will have fewer family resources and connections to obtain good jobs. This situation is becoming increasingly common in the United States as well (Thurow 1975), where it has been argued that persons from lower social classes systematically lack access to those labor markets that provide the higher paying and prestigious jobs (Gordon 1972; Gordon, Reich and Edwards 1973; Carnoy and Carter 1974). Finally, the advent of higher educational participation for the less advantaged youth is coming at a rather late stage historically in the system of educational development where the increasing masses of graduates have tended to bid down the return to higher education relative to what it had been in its more elite period (R.B. Freeman 1976; Carnoy 1971).

Summary of the Four Standards

Whether we use the standard of equality of educational access, educational participation, educational results, or educationally-induced life chances, it does not appear that the operation of the educational systems of Western Europe meet any of the standards. To a large extent it appears that the educational treatments and results for western European youth mirror the initial differences in their social class origins as well as sex differences. But, one other question might come to mind. Even if education has not seemed to alter the relative positions of persons within

the educational, occupational, and income distributions, perhaps the distributions themselves are now more equal as a result of the educational system. That is, even if the offspring of working class families are not as well off as those from professional families, perhaps the differences between the two groups have diminished.

There is little doubt that the distribution of education has become more nearly equal throughout Western Europe. Analysis of the distribution of education, by age cohort, shows a universal trend towards increasing equality for virtually all countries (Kotwal 1975). But, there seems to be little relation between the increasing equality of educational attainments (in nominal years of schooling) and the distribution of income. Comparative studies of the distribution of income in Western Europe have found evidence of rising inequalities or relative stability of the income distribution with no tendency towards greater equality (Jain 1975). This appears to be true whether one uses such summary measures of the income distribution as the gini coefficient or whether one examines the share of income received by the richest and poorest segments of the population as long as similar sampling approaches are utilized.[7] One might also add that the same results have been found for the United States (Thurow 1975).

III. INTERPRETATION AND CONSEQUENCES

In this section, I would like to present a short interpretation of these results and some future consequences. Such an exercise must necessarily be speculative, but I believe that an increasing body of evidence and analysis supports this particular interpretation. There are at least two explanations for the fact that despite the existence of official

policies of equal educational opportunity by western European nations, the actual results are quite the opposite. One explanation is that the governments and educators have simply not found the appropriate reforms or allowed the necessary time for them to work. This is the typical optimistic response of the educator and his liberal supporters as well as most government spokesmen. It is a call for more reforms, more educators, more social science evaluators, and an underlying ideology that the problem of obtaining equal educational opportunity and greater social mobility is essentially a technical problem.

In contrast, it might be argued that the extent of social mobility and inequality are conditions that derive from the basic functioning of economic, political, and social institutions in capitalist or socialist societies and particularly from the relations of production, and that all institutions of socialization tend to reproduce the requirements for maintaining these institutions. In this case, it would be functional for the schools to reproduce the inequalities of the larger society according to the initial class origins of its members. Indeed, from this perspective it is absurd to think of the state as a neutral observer that will attempt to counter the power of the dominant groups in society to maintain their own positions, for the state is in itself a creature of that society and its ruling classes (Miliband 1969; Poulantzas 1973). It is in this latter context that I believe that we can best view the functions of schooling in Europe (Baudelot and Establet 1971) as it is increasingly being viewed in the United States as well (Bowles and Gintis 1976; Carnoy and Levin 1976). The basic problem is that the schools serve to reproduce labor for the

unequal relations of capitalist production, and there is a basic contradiction between this function and that of increasing social mobility or equality. While this explanation is set out in greater detail in recent works (Althusser 1971; Boudelot and Establet 1971; Bowles and Gintis 1976; Carnoy and Levin 1976; Levin 1974; Carnoy 1974; and Behn et al., forthcoming), it is only possible to present a brief description here.

The advent of universal schooling had its origins in the early phases of industrialism that spread across the U.S. and most of Western Europe starting at the beginning of the nineteenth century (Bowles and Gintis 1976). Prior to industrialism, most production took place in the home, the small workshop, or the farm, and preparation for work took place through clerkships, apprenticeships and other learning-by-doing activities.

But, the impersonal and bureaucratic nature of large-scale production represented by the emerging factory system required a new type of worker. Essentially, such a worker had to know how to behave in a de-personalized hierarchy where he was governed completely by the rules, regulations, organization, and external reward structures set out by the capitalist owners and managers (Weber 1958). The school arose in a fashion much like the factory with its emphasis on rules, hierarchical relationships, system of extrinsic rewards, high degree of discipline, and so on in order to prepare wage labor for the expanding system of large-scale capitalist production and its need for a growing and socialized work force with appropriate work behaviors.

The quest for profits and unending capital accumulation required an expanding work force of docile, disciplined, and structurally alienated

workers, and the initiation of state-sponsored schools emerged to satisfy these needs. As a result, the social relations of "production" in schooling served to reproduce the social relations of work.

> It takes little imagination to see the correspondence between grades for school performance and wages for work performance; to see the alienation and boredom of the assembly line mirror the stifling environment and boredom of the educational assembly line; to see the competition among students for grades parallel the competition among workers for advancement; to see the teacher in the classroom impose his arbitrary values on his underlings just as does the boss on the job (neither legitimacy of authority resulting from a democratic election) (Levin 1974).

But, the schools represented not only a principal agency of socialization for reproducing the social division of labor for capitalist production. They also began to represent the vehicle for social mobility from traditional to industrial society, from rural to urban society, from the farm to the factory as exposure to schooling opened new opportunities for persons who were otherwise relegated to marginal agriculture. This aspect was especially promoted by the state in assisting the capitalists to obtain an expanding and appropriately trained work force through the initiation of state-sponsored schooling and the advent of compulsory attendance laws that would assure the provision of a growing pool of surplus labor with its depressing effect on wage costs. Indeed, as we mentioned at the beginning of this paper, the public promotion of schooling has always been advertised as being associated with its role in fostering social mobility as well as the ideology that mobility is possible through the schooling system.

Accordingly, two of the principal roles that have been played by the educational systems of Western Europe are (1) the preparation of an

expanding,disciplined and docile work force for filling the needs of capitalist and particularly, monopoly-capitalist enterprises for wage-labor and (2) the vehicle for providing social mobility as well as for inculcating the ideology that social mobility is possible through diligence in educational endeavor. But, there is a basic contradiction between these two roles since capitalist production is based upon the existence of a work force consisting of a pyramidal hierarchy of positions that differ substantially in income, prestige, and power. The vast majority of positions are at the bottom of the productive enterprise, and there is only limited mobility among the many "mini-ladders" of occupational positions that compose the larger hierarchy from the many alienated workers at the bottom to the relatively few and independent capitalist managers and owners at the top (Braverman 1974; Marglin 1974). Moreover, the schools, family, and other agencies of socialization for work tend to reproduce the work structure on the basis of the initial class structure of the previous generation as evidenced by the data that we have presented on schools as well as those on the functions of families (Kohn 1959; 1969; Kohn and Schooler 1969; Bowles and Gintis 1976; Carnoy and Levin 1976).

This means that the only way that social mobility aspect is compatible with the class reproduction aspect is when there is a constant expansion of higher level occupational positions in the productive structure. More specifically, the social mobility of educated workers depends crucially on the expansion and growth of enterprises in order to provide more and better positions for educated workers. That is the key

to reconciling both the preparation of workers for highly unequal positions in the productive work structure and its associated class hierarchy and the provision of social mobility is a pattern of economic growth that is able to provide increasing numbers of higher and higher occupational positions as larger and larger numbers of educated workers are produced by the schools.

In short, there is a rather delicate relationship between the ability to prepare persons for the existing hierarchical relations of capitalist production and to provide occupational positions commensurate with their levels of education, and the correspondence is only established at that point where the expansion of the productive hierarchy is at least large enough to absorb the numbers of educated persons that are created at each educational level. In periods of very rapid economic growth, no contradiction arises even if the occupational expansion exceeds the educational increases, because firms will have an incentive to train and upgrade existing workers and labor-market entrants to fill needed positions. But, when the level of economic growth is not adequate to absorb the increases in educated workers at appropriate occupational levels, there is an obvious contradiction that arises between the expectations of educated workers for social mobility and the needs of the work place.

In general, the Western European countries experienced high levels of economic growth during the post-World War II period which was able to absorb rising enrollments. But, since the early seventies the rates of economic growth have slowed, while post-secondary educational expansion has remained high, although varying considerably from country to country (Cerych et al.,

1974: 18-23). Even with relative declines in the size of the eligible population groups:

> ...there is little to indicate that the expansion will be less than 4-6% per annum, which means a further doubling of enrollments within the next 12 to 18 years,..., and it must be remembered...that practically all past projections have represented under-estimations... (Cerych et al., 1974: 21).

It is highly dubious that rates of economic growth will keep pace, as a number of factors in the early seventies have contributed to what appears to be a long run reduction in the historic post-war growth rate.[8] As Gorz has noted, the low growth rates are due largely to an over-accumulation of capital and a resulting decline in the rate of profit that results from the existing saturation of home markets as well as the lack of basic technological breakthroughs that would stimulate the writing off of past investment and the replacement of existing capital (Gorz 1976:1).

> Such a type of crisis of overaccumulation has been overcome in the past only by either destruction of capital, mainly through war, or technical revolutions which, most of the time, were also a side effect of war (p. 2).

But, he adds to this dilemma a new physical limitation on growth, the exhaustion of cheap mineral and energy resources as well as the traditionally "free" resources such as air and water.

> In the last decade the cost of economic growth, both direct and indirect, has skyrocketed for physical, environmental reasons which were totally unpredicted and unpredictable by neo-classical economists. Amongst other things, industrial growth has run up against a shortage of hitherto unlimited resources such as space, water, and air, and the willingness of people to acceot the requirements of work in industry. To take a rather striking example--in Europe, the chemical industry in the Rhine Valley, which as you know, is made up of three very large German chemical corporations, has experienced the impossibility of further local growth unless it first built new cities to house new workers

> which would require the buying of very expensive agricultural land; and, second, unless it took drastic measures to control air and water pollution since the Rhine water is already in such a state that it can no longer be made drinkable in its lower portion which compels the Netherlands to import much of their drinking water by boat, from Norway (Gorz 1976:2).

In addition to these factors, investment of European capital is likely to move increasingly to Asia, Latin America, and Africa where those governments can still provide expanding labor supplies at subsistence wages. In such countries as South Korea, Taiwan, the Philippines, and Brazil, the state has created a cheap and exploitable labor supply to attract foreign investment. Free trade unions are forbidden, and protective minimum wages, social security benefits, and occupational safety standards do not exist or exist in name alone as they are easily by-passed by various types of "non-coverage" provisions or by "gifts" to the appropriate governmental officials. There are few restrictions against despoilation of natural resources by foreign capital as well. Finally, the safety of these investments is guaranteed by totalitarian governments with strong internal repression by the military and police, so that investment risk is low while profits are extraordinarily high.

Thus, there are limits on the future economic growth of the Western European countries that will result in lower secular growth rates for the foreseeable future. But, at the same time the educational expansion that was generated by the reforms of secondary education in the sixties has spawned a high rate of growth in and level of enrollments among the universities so that the economic system has not and will not be able to expand rapidly enough to absorb the increasing supply of educated workers. Already, the relative and absolute

unemployment rates of university graduates seem to be rising as such persons are increasingly unable to find suitable placements. For example, as late as 1971 French university graduates faced unemployment rates only half as great as those faced by holders of a terminal Baccalauréat, 3.9 percent and 8.3 percent, respectively (Levy Garboua 1975:9). But, in 1972 the unemployment rate rose to 9 percent and 8.7 percent, respectively, and in 1974 the rate of unemployment for those with university degrees actually exceeded slightly that of persons with the Baccalauréat, 8.5 percent to 8.7 percent, respectively (Ibid.).[9]

It is the contradiction between the educational expansion with its rising expectations of an increasingly educated labor force for jobs commensurate with their educational attainments and the inability of Western European monopoly capitalism and its supportive state bureaucracies to meet those expectations that will provide the basis for change in both the educational and the work setting. For as young educated workers find increasingly that their job expectations are not likely to be satisfied, they will not be integrated into work structures as readily and in as docile a manner as were their predecessors. Higher education tends to inculcate skills, values, and attitudes that correspond to the most prestigious jobs in the work hierarchy as well as creating expectations of having the high status, income, independence and mobility that such jobs afford. In contrast, young university graduates will find themselves competing with relatively less-educated workers for jobs of lower prestige and income that allow only limited mobility and that are characterized by a much greater tendency towards routinized work.

The symptoms of this contradiction between the schools and the work place will be the increasing disaffection of youth towards both work and society and rampant social instability as the expectations created by the system of socialization are dashed by the distasteful realities of the available opportunities. Frustrations and dissatisfaction that will ensue will manifest themselves increasingly into disruptions of production and lower productivity. Examples of these are likely to be further deterioration in the quality of workmanship so that quality control will become a more serious problem. In addition, we are likely to see rising incidences of absenteeism, employee turnover, and alcohol and drug usage on the job as well as increasing work stoppages created by wildcat strikes and employee sabotage. These problems are already evident in Western Europe (David Jenkins 1974 and 1974a) and they have become significant enough in the U.S. that the national government has issued its own report on the subject (U.S. Department of Health, Education, and Welfare 1973:Chaps. 2 and 3).

In short, the increasing disjuncture between the values and expectations of the educated worker and the realities of the work place will create what Gintis (1975) has called a new working class of revolutionary youth, an educated proletariat. Moreover, the magnitude of the contradiction and its effects is likely to move beyond the work place to the schools and possibly the streets and other institutions in the form of a sequel to the strikes of 1968, at least in countries like France and Germany where the contradictions will be most exacerbated. The timing and extent of the crisis will depend on the ability of the state and capitalist employers to mediate the contradiction by altering both education and work to bring

them once again into correspondence. These include attempts to change the normal patterns of educational development and to reduce expectations of high occupational status and mobility for educated workers by altering the organization of work. Specific reforms or proposed reforms include the following:

(1) Increasing the Selectivity of Universities--There has been a progressive introduction of restricted entrance into the universities in such countries as Germany, France and the Scandinavian nations where the most prestigious fields of study are restricted to students who meet specific study or examination requirements (Pellegrin 1974:86). It is likely that these types of admission strictures will increase in order to discourage students from applying as well as to reduce the numbers who might otherwise be eligible to attend. In addition, we are likely to see increases in drop-out or wastage rates as pressures are put on the university faculties to "cool-out" higher numbers of enrollees. This phenomenon has been historically associated with those institutions of higher education that are less selective at entry (OECD, Development of Higher Education 1950-67, 1974: Chap. VI).

(2) Absorbing Increases Through Alternative Higher Education--There will be an increasing move towards absorbing the enrollments of the "new entrants" through lower cost and less prestigious alternatives such as Open Universities that use correspondence, radio, and television courses; a renewed emphasis on the short-cycle higher education course and development of community college types of institutions as they exist in the U.S. and U.K.; and expansion of the non-prestigious fields of study relative to the more

prestigious ones. These developments will have the effect of further developing a system of social stratification within higher education which will identify the marketability of students according to a refined credentialism. Since the lower status student will be more likely to be found in the lower cost and lower status alternatives (Pellegrin 1974a:32), this development will tend to enable employers to discriminate in favor of students from higher socio-economic origins on the basis of an educational credential with the tacit defense that the credential is related to productivity (Arrow 1973; Spence 1973; Karabel 1972; Bowles 1974). Thus educated unemployment and underemployment will be more severe among graduates from lower social class origins than from higher ones.

(3) Developing an Alternative Educational Pattern--There will be strong attempts to change the traditional educational pattern by developing systems of recurrent education where students will be encouraged to leave secondary schooling or higher education to return at some future time as they develop new educational needs (Mushkin 1974: E. Faure, et al., 1972). This effort will be aimed at reducing the present high social demand for education by breaking the traditional educational cycle. Of course, the relative lack of productive work for young persons who leave the educational system will tend to work against their taking the recurrent educational approach seriously. However, it might also be expected that persons in the labor force who undertake recurrent education to obtain new skills will open up positions for job entrants during the duration of their schooling. In conjunction with this latter possibility, there is increasing provision in Western Europe for creating educational sabbaticals that would permit

workers to leave for a specified period of time to study at government expense--generally through the support of a payroll tax (H. A. Levine 1974). This device would also emphasize recurrent education while increasing labor market opportunities for new entrants.

(4) Emphasizing Career Education--As in the United States there is an emerging trend to consider the educational system in the context of "career education," an attempt to integrate schooling more closely with the workplace (Grubb and Lazerson 1975; Esnault and Le Pas 1974:165-169). Such an approach would attempt to integrate more closely the worlds of education and work by increasing career guidance on the nature and attributes of existing job positions; increasing the career content of curricula; interspersing periods of work and schooling as part of the regular educational cycle; and providing a more "realistic" understanding of the nature of work and available opportunities. Obviously, an important aspect of this approach is to reduce the "unrealistically high" expectations for high-level careers and to guide students into preparing for the more attainable lower-prestige ones. Already, the French government has announced a university reform which would increase the influence of the business community on the curriculum and policy of the university in order to improve its career preparation.

All four of these educational reforms would tend to reduce the pressure on the workplace for better jobs, while further stratifying the students in higher education in order to improve the credentialism of the higher educational system according to social class. A variety of reforms in the workplace are also being initiated in order to mediate the contradiction between education and work. The three general categories include:

(1) Changing the Organization of Work--Throughout Europe there are increasing attempts to decrease worker turnover, absenteeism, and product quality problems that are emerging, by altering the organization of the work place. In general, these changes emphasize an increasing role for worker participation at either the level of the governing board (Mitbestimmung) or at the shop floor (OECD, Workers' Participation 1976; OECD, Work in a Changing Industrial Society 1974; Jenkins 1974). It is expected that such reforms would increase the loyalty of workers to the firm by expanding their direct participation or representation in decision making as well as by emphasizing their allegiance to fellow workers through the use of work teams (Blumberg 1968). There is also an increasing orientation towards horizontal mobility rather than vertical mobility within the firm. Thus, the educational sabbatical approach that was referred to previously does not necessarily prepare persons for higher positions, but it can be interpreted as a job benefit in itself that gives the worker time away from the work place to pursue his own interests. In the long run we will see increasing attempts to flatten the work hierarchy with emphasis on horizontal differences in work roles and work rotation, although the success of such changes will depend obviously on the ability of the enterprises to maintain worker discipline and production when the possibilities of upward mobility are reduced in favor of the new organization of increased horizontal mobility (Marglin 1974).

(2) Increasing the Prestige of Blue-Collar Work--A second alteration on the work-side of the relationship is the attempt to reduce the social emphasis on white-collar positions and/to raise the social prestige of blue-

collar ones. If this is successful, it is expected that many students who might otherwise have sought university educations will be content with secondary completion and short-cycle higher education or will even leave secondary school with vocational preparation. Already in France there is a public media campaign to raise the status of the blue-collar worker by emphasizing that he has a craft and produces "real" things that are important to society rather than just dealing with paper.

(3) Providing Public Jobs--Finally, attempts are likely to be made to provide increasing numbers of jobs in the public sector for the educated-unemployed. This is a strategy that has worked historically as much of the increase in educated labor was absorbed by the public bureaucracies. But, it is also an approach that is dependent upon rapid economic growth in order to obtain the public tax revenues that will support such government expansion. With slow economic growth the increases in revenues of the important value-added tax as well as other sales and excise taxes will not provide rapidly increasing yields, and it will be difficult to raise taxes from other sources such as income for the expansion of social services which will provide the additional jobs. Accordingly, the expansion of the public sector to absorb the increases in educated persons will also face intrinsic barriers.

The success of these changes in education and work to mediate the basic contradiction between the two major functions of the schools in Western Europe—to provide a trained work force for capitalist production as well as a means of social mobility--are difficult to ascertain. Even if they are partially successful, they are not likely to avoid rising class

consciousness within the expanding educated proletariat, a factor which will have its own consequences. But, above all, it is clear that there are limits to the use of the educational system to provide social mobility and equality, and these limits are embedded in the structures of the societies rather than in the lack of educational reforms (Carnoy and Levin 1976). Without a movement towards greater equality in the economic sphere and its related political and social arenas, we are not likely to see an improvement in social mobility in Western Europe.

1. Of course, even when the same standards and data are used, there appear to be strong ideological factors dominating the interpretation of whether there is a high or low degree of equality of opportunity and what is the appropriate method of analysis. Compare, for example, the commentaries of S.M. Lipset (1972) and S.M. Miller (1975) on the former issue and R. Hauser (1976) and R. Boudon (1976) on the latter one.
2. I think that it is generally accepted that the schools of working class youngsters tend to be much less supportive than those of students from higher class origins. An insider's view of such class orientations is reflected in Letter to a Teacher written by a handful of Italian youth from peasant families in the region of Tuscany. They begin their letter with the simple, eloquent, and poignant words: "You won't remember me or my name. You have flunked so many of us. On the other hand I have often had thoughts about you, and the other teachers, and about that institution which you call "school" and about the kids that you flunk. You flunk us right out into the fields and factories and there you forget us." (Schoolboys of Barbiana 1971: 3).
3. Some detail on the structure and changing nature of secondary education in Western Europe is found in OECD, Development of Secondary Education, Trends and Implications (1969).
4. This represents an interesting bit of support for the view that inequalities within the educational system seem to reflect much more the inequalities of the societies in which they are embedded than they do the formal characteristics of the educational system such as

whether it is selective or comprehensive in participation. Compare this finding with the predictions of Boudon (1973), Bowles and Gintis (1976) and Carnoy and Levin (1976).

5. Short-cycle higher education is directly comparable with the vocationally-oriented curricula in the community colleges of the U.S. It differs in one very important respect in that it does not prepare a student to transfer to the University after two years of studies as does the Community College. However, there has been discussion of moving towards the Community College model more fully by using it to set out a course of basic academic studies as well as applied career-studies (OECD, Short-Cycle Higher Education, 1973).

6. Evidence of differences in pecuniary returns to schooling of different quality is found for the United States in a number of studies (Alwin 1976; Solmon and Wachtel 1975; and G. Psacharopoulos 1975:Chap. 4). Differences in returns to type of education and to education within occupation for a Swedish sample of men are found in I. Fägerlind (1975): 70-76.

7. A good overview of problems in the measurement and analysis of the distribution of income is found in A.B. Atkinson (1975) and A.K. Sen (1973).

8. Of course, even if the post-secondary expansion does not exceed the growth of GNP, the disparity between the nature of jobs and job entrants remains as long as there are initial compositional differences between the two. For example, if in 1970 a Western European country

had an occupational distribution that required university graduates for fifteen percent of its jobs, but twenty-five percent of the labor force were university graduates, then the disparity between jobs and education will continue to exist even if GNP and the number of college graduates grow at the same rate. I am arguing that not only is there an initial excess of educated persons relative to appropriate jobs, but that for many countries in Western Europe the increases in educated persons will also exceed the increases in the development of appropriate jobs.

9. In the United States the unemployment rates for college graduates is lower than that for secondary school graduates as the former have tended to increasingly replace the latter in the occupational structure (Berg 1970; Milner 1972; Thurow 1975; Freeman 1976). But in Western Europe a university graduate has a social position to maintain that does not enable him to easily accept a job as a clerk, waiter, or operative. Indeed, to obtain such a job may jeopardize his future options for appropriate positions at the university graduate level. Accordingly, the European university graduate who is not able to obtain a "proper" position is more likely to sit in the cafe while engaged in political and intellectual discussions than to wait on tables in the cafe as do many of his American counterparts.
One important assumption that I am making is that the present disjuncture between the number of graduates and jobs is not a cyclical phenomenon, but a secular one. This assumption is based partly upon my projection of lower economic growth rates for the foreseeable

future and partly upon my presumption that growth rates in European post-secondary enrollments will continue in spite of high levels of unemployment and increasing underemployment of graduates. The latter presumption is based upon the relatively high social prestige of higher education in Europe as well as the emergence of job competition where those with more education will increasingly accept positions that require less education and displace the lower educated. Under such a "job-queue" phenomenon, the private rates of return to investment in higher education may remain high or increase as the opportunity cost represented by the returns to a secondary school diploma diminish in relative terms (Thurow 1975).

Freeman (1975) argues that the "overeducation" phenomenon in the United States is also a secular phenomenon that will improve somewhat in the nineteen eighties but will never return to the situation experienced in the sixties. Finally, while demographic trends and recession certainly explain part of the recent excess of educated labor in Western Europe and conditions may improve in the short-run, I am referring to a secular and structural problem rather than one that has been created only by cyclical phenomena.

BIBLIOGRAPHY

Althusser, Louis. Lenin and Philosophy and Other Essays. (New York: Monthly Review Press, 1971), pp. 127-186.

Alwin, Duane F. "Socioeconomic Background, Colleges, and Post-Collegiate Achievements," in W. H. Sewell, R. Hauser, and D. Featherman (eds.) Schooling and Achievement in American Society (New York: Academic Press, Inc., 1976), pp. 343-372.

Anderson, C. Arnold. "A Skeptical Note on Education and Mobility," in A. M. Halsey, et al., (eds.) Education, Economy, and Society (New York: Macmillan and Co., 1961), pp. 164-179.

Arrow, Kenneth. "Higher Education as a Filter," Journal of Public Economics, vol. 2, No. 3 (July 1973), pp. 193-216.

Atkinson, A. B. The Economics of Inequality. (Oxford: Clarendon Press, 1975).

Baran, Paul & Paul Sweezy. Monopoly Capital. (New York: Monthly Review Press, 1966).

Baudelot, Christian & Roger Establet. L'Ecole Capitaliste en France. (Paris: Librairie François Maspero, 1971). Available in Spanish as La Escuela Capitalista, (Madrid: Siglo Veintiuno Editores, 1975).

Behn, W., M. Carnoy, M. Carter, J. Crain, H. Levin, P. Moriarty, & K. Wilcox. Education and Work: The Development of a Radical Hypothesis, in process (Palo Alto, Cal.: Center for Economic Studies, forthcoming).

Bell, Daniel. Coming of Post-Industrial Society: A Venture in Social Forecasting. (New York: Basic Books, Inc., 1973).

Bendix, R., & S. M. Lipset (eds.) Class, Status, and Power: Social Stratification in Comparative Perspective. (New York: The Free Press, 1966).

Bengtsson, Jarl, et. al. Does Education Have a Future? The Political Economy of Social and Educational Inequalities in European Society. Plan Europe 2000, Project 1, Educating Man for the 21st Century, vol. 10. (The Hague: Martinus Nijhoff,1975).

Berg, Ivar. Education and Jobs: The Great Training Robbery. (New York: Praeger, 1970).

Blumberg, Paul. Industrial Democracy: The Sociology of Participation. (New York: Schocken Books, 1968).

Boudon, Raymond. Equality, Opportunity, and Social Inequality. (New York: John Wiley and Sons, Inc., 1973).

Boudon, Raymond. "Comment on Hauser's Review of Education, Opportunity, and Social Inequality," American Journal of Sociology, vol. 81, No. 5 (March 1976), pp. 1175-1186.

Bourdieu, Pierre. "Condition de Classe et Position de Classe," Archives Européennes de Sociologie, vol. 7, pp. 201-223.

Bowles, Samuel. "The Integration of Higher Education in the Wage Labor System," Review of Radical Political Economy, vol. 6, No. 1 (1974), pp. 100-133.

Bowles, Samuel. "Understanding Unequal Educational Opportunity," American Economic Review, vol. 63 (May 1973), pp. 346-356.

Bowles, Samuel, & Herbert Gintis. Schooling in Capitalist America. (New York: Basic Books, Inc.: 1976).

Braverman, Harry. Labor and Monopoly Capital. (New York: Monthly Review Press), 1974.

Busch, Georg. "Inequality of Educational Opportunity by Social Origin in Higher Education," in Education, Inequality and Life Chances, vol. 1 (Paris: OECD, 1975), pp. 159-181.

Carnoy, Martin. "Class Analysis and Investment in Human Resources: A Dynamic Model," The Review of Radical Political Economics, vol. III, No. 4(Fall/Winter 1971), pp. 56-81.

Carnoy, Martin. Education as Cultural Imperialism. (New York: David McKay Co. Inc., 1974).

Carnoy, Martin, & Henry M. Levin. The Limits of Educational Reform. (New York: David McKay and Co , Inc., 1976).

Carroll, J. B. The Teaching of French as a Foreign Language in Eight Countries. (New York: John Wiley and Sons, 1975).

Cerych, Ladislav, Dorotea Furth, & George S. Papadopoulos. "Overall Issues in the Development of Future Structures of Post-Secondary Education," in Policies for Higher Education. (Paris: OECD, 1974), pp. 15-51.

Clark, Burton. "The 'Cooling Out' Function in Higher Education." The American Journal of Sociology, vol. 65, No. 6 (May 1960), pp. 569-577.

Coleman, James S. "The Concept of Equality of Educational Opportunity," Harvard Educational Review, vol. 38 (1968), No. 1, pp 7-22.

Coleman, James S., et al., Equality of Educational Opportunity. U.S. Office of Education (Washington, D.C.: U.S. Government Printing Office, 1966).

Coleman, James S. "Towards Open Schools," The Public Interest, vol. 6 (Fall 1967), pp. 20-27.

Comber, L. C., & J. P. Keeves. Science Education in Nineteen Countries. (New York: John Wiley and Sons, 1973).

Cremin, Lawrence A. (Ed.), The Republic and the School: Horace Mann on the Education of Free Men. (Washington D.C.: National Education

Dewey, John. Democracy and Education. (New York: Tha MacMillan Co. 1916) Free Press Paperback Edition (New York: The Free Press, 1966).

Diez, Nicolas J., U. Martinez Lazaro, & J. M. Porro Monondo. "Education and Social Mobility in Spain," in Education, Inequality and Life Chances, vol. 1 (Paris: OECD, 1975), pp. 563-612.

Edwards, Richard C., Michael Reich, & Thomas E. Weisskopf (eds.), The Capitalist System. (Englewood Cliffs, N.J.: Prentice Hall, Inc., 1972).

Eicher, Jean Claude, & Alain Mingat. "Education et Egalite en France," in Education, Inequality and Life Chances, vol. 1 (Paris: OECD, 1975), pp. 202-292.

Esnault, Eric & Jean Le Pas. "New Relations Between Post-Secondary Education and Employment." Towards Mass Higher Education. (Paris: OECD, 1974), pp. 105-169.

Fagerlind, Ingemar. Formal Education and Adult Earnings. Acta Universitatis Stockholmiensis, Stockholm Studies in Educational Psychology 21. (Stockholm: Almquist and Wiksell, 1975).

Faure, Edgar, et al. Learning to Be: The World of Education Today and Tomorrow. (Paris: UNESCO/Harrap, 1972).

Floud, J. E. Social Class and Educational Opportunity. (London: William Heinemann Ltd., 1956).

Freeman, Richard B. The Over-Educated American. (New York: Academic Press, 1976).

Friedman, Milton. Capitalism and Freedom. (Chicago: University of Chicago Press, 1962).

Gintis, H. "The New Working Class and Revolutionary Youth," in M. Carnoy (ed.), Schooling in a Corporate Society. Second Ed., (New York: David McKay and Co., Inc., 1975), pp. 293-309.

Glass, David. Social Mobility in Britain. (London: Routledge and Kegan, 1954).

International Labour Organisation. World Employment Programme: Research in Retrospect and Prospect. (Geneva: ILO, 1976).

Jain, Shail. Size Distribution of Income. (Washington, D.C.: The World Bank, 1975).

Jenkins, David. Industrial Democracy in Europe. (Geneva: Business International S.A., 1974).

Jenkins, David. Job Power. (Baltimore: Penguin Books Inc., 1974) 1974a.

Jencks, C., et al. Inequality. (New York: Basic Books, Inc., 1972).

Jensen, A. R. "How Much Can We Boost IQ and Scholastic Achievement?" Harvard Educational Review, vol. 39 (1969), pp. 1-123.

Kamin, Leon. The Science and Politics of IQ. (Potomac, Md.: Erlbaum Associates, 1974).

Karabel, Jerome. "Community Colleges and Social Stratification," Harvard Educational Review, vol. 42, No. 4(November 1972), pp. 521-562.

Kohn, Melvin L. Class and Conformity: A Study in Values. (Homewood, Ill.: Dorsey Press, 1969).

Kohn, Melvin L. "Social Class and Parental Values." American Journal of Sociology, vol. 64 (1959), pp. 337-351.

Kohn, Melvin L. & Carmi Schooler. "Class, Occupation, and Orientation." American Sociological Review, vol. 34 (1969), pp. 659-678.

Kotwal, Marilyn. "Inequalities in the Distribution of Education Between Countries, Sexes, Generations, and Individuals," in Education, Inequality and Life Chances, vol. 1 (Paris: OECD, 1975), pp. 31-108.

Levin, Henry M. "Equal Educational Opportunity and the Distribution of Educational Expenditures." Education and Urban Society. (February 1973), pp. 149-176.

Levin, Henry M. "Educational Reform and Social Change." The Journal of Applied Behavioral Science, vol. 10, No. 3(August 1974).

Levine, Herbert A. "Strategies for the Application of Foreign Legislation on Paid Educational Leave to the United States Scene." A Paper prepared for the Career Education Program, National Institute of Education, NIE-C-74-0107 (1974), processed.

Levy-Garboua, L. "The Development of Mass University Education in France and the Student Dilemma." (Paris: CREDOC and University of Paris-Nord, December 1975) processed.

Gordon, David M. Theories of Poverty and Underemployment. (Lexington, Mass.: Lexington Books 1972).

Gordon, David, Michael Reich, & Richard Ewards. "A Theory of Labor Market Segmentation," American Economic Review, vol. 63, No, 2 (may 1973), pp. 359-365.

Gorz, Andre. Socialism and Revolution. (Garden City, N.Y.: Anchor Books, Doubleday and Co., Inc., 1973).

Gorz, Andre. "Untitled." Paper presented at Faculty Seminar on Social Thought and Social Institutions, Stanford University (February 6, 1976), copies available from H. Levin.

Grubb, W. Norton, & Marvin Lazerson. "Rally Round the Workplace: Continuities and Fallacies in Career Education." Harvard Educational Review, vol.45, No. 4 (November 1975), pp. 451-474.

Halsey, Albert H. "Education and Social Mobility in Britain Since World War II," in Education, Inequality and Life Chances, vol. 1 (Paris: OECD, 1975), pp. 501-559.

Hauser R. M. "On Boudon's Model of Social Mobility." American Journal of Sociology, vol. 81, No. 4 (January 1976), pp. 911-928.

Herrnstein, Richard. IQ in the Meritocracy. (Boston: Atlantic Monthly Press, 1973).

Husen, Torsten. (Ed.) International Study of Achievement in Mathematics, vol. I and II, (New York: John Wiley and Sons, 1967).

Husen, Torsten. Social Background and Educational Career. Centre for Educational Research and Innovation (Paris: OECD, 1972).

Husen, Torsten. Talent, Equality and Meritocracy. Europe 2000, Project 1, vol. 9, (The Hague: Martinus Nijhoff, 1974).

Husen, Torsten. Social Influences on Educational Attainment. Centre for Educational Research and Innovation, (Paris: OECD, 1975).

Husen, Torsten. "The Standard of the Elite: Some Findings from the IEA International Survey in Mathematics and Science." Acta Sociologica, vol. 16, No. 6, pp. 305-323.

Illich, Ivan. Deschooling Society. (New York: Harper and Row, 1971).

Inkeles, Alex. "The Emerging Social Structure of the World." World Politics, (July 1975), vol. 27, No. 4, pp. 467-495.

Inkeles, Alex, & David H. Smith. Becoming Modern. (Cambridge, Mass.: Harvard University Press, 1974).

Lewis, G.E. & C.E. Massad. The Teaching of English as a Foreign Language in Ten Countries. (New YOrk: John Wiley and Sons, 1975).

Lipset, S.M. "Social Mobility and Equal Opportunity." Public Interest No. 29 (Fall:1972), pp. 90-108.

Lipset, S.M. & R. Bendix. Social Mobility in Industrial Society. (Berkeley: University of California Press, 1959).

Lumsden, Keith G. & Charles Ritchie. "The Open University: A Survey and Economic Analysis." Instructional Science, Vol. 4, No. 3/4 (October 1975), pp. 237-292.

Maddison, Angus. "Education, Inequality and Life Chances: The Major Policy Issues," in Education, Inequality and Life Chances, Vol. 1 (Paris: OECD, 1975), pp. 12-30.

Malthus, Thomas R. On Population, Modern Library Edition. (New York: Random House, Inc., 1960).

Mann, Arthur. "A Historical Overview: The Lumpenproletariat, Education, and Compensatory Action," in The Quality of Inequality: Urban and Suburban Public Schools, Charles U. Daley (ed.). (Chicago: University of Chicago Press, 1968), pp. 9-26.

Marglin, Steve. "What Do Bosses Do?" Review of Radical Political Economics. (Summer 1974), pp. 60-112.

Miliband, Ralph. The State in Capitalist Society. (London: Weidenfeld and Nicholson, 1969).

Miller, S.M. "Social Mobility and Equality," in Education, Inequality and Life Chances, Vol. 1 (Paris: OECD, 1975), pp. 394-433.

Miller, S.M. "Comparative Social Mobility." Current Sociology, Vol. IX (1960), pp. 1-89.

Milner, Murray. The Illusion of Equality. (San Francisco: Jossey-Bass, 1972).

Ministry of Education, Sweden, Hogskolestatistik II (1976).

Mushkin, Selma J. (Ed.). Recurrent Education, National Institute of Education, U.S. Department of Health, Education, and Welfare. (Washington, D.C.: U.S. Government Printing Office 1974).

OECD, Workers' Participation. (Paris: OECD, 1976).

OECD, Work in a Changing Industrial Society. (Paris: OECD, 1975).

OECD. Educational Statistics Yearbook, Vol. II, County Tables. (Paris: OECD, 1975).

OECD. Educational Development Strategy in England and Wales. (Paris: OECD, 1975).

OECD. Education and Working Life in Modern Society. (Paris: OECD, 1975).

OECD. Education, Inequality and Life Chances, 2 Vols. (Paris: OECD, 1975).

OECD. Education in OECD Developing Countries, Trends and Perspectives. (Paris: OECD, 1974).

OECD. OECD Policies for Higher Education. (Paris: OECD, 1974).

OECD. Educational Statistics Yearbook, Vol. 1, International Tables (Paris: OECD, 1974).

OECD. Participatory Planning in Education. (Paris: OECD, 1974).

OECD. The Educational Situation in OECD Countries. (Paris: OECD, 1974).

OECD. Towards Mass Higher Education. (Paris: OECD, 1974).

OECD. Short-Cycle Higher Education. (Paris: OECD, 1973).

OECD. Long-Range Policy Planning in Education. (Paris: OECD, 1973).

OECD. Educational Policy and Planning: France. (Paris: OECD, 1972).

OECD. Classification of Educational Systems. (Paris: OECD, 1972).

OECD. Reviews of National Policies for Education: France. (Paris: OECD, (1971).

OECD. Development of Higher Education, 1950-1967 Analytic Report. (Paris: OECD, 1971).

OECD. Development of Higher Education, 1950-1967 Statistical Survey. (Paris: OECD, 1970).

OECD. Development of Secondary Education, Trends and Implications. (Paris: OECD, 1969).

OECD. Methods and Statistical Needs for Educational Planning. (Paris: OECD, 1967).

OECD. Manpower Forecasting in Educational Planning. (Paris: OECD, 1965).

Passow, A.H., H.J. Noah, M.A. Eckstein, & J.R. Mallea. The National Case Study: An Empirical Comparative Study of Twenty-One Educational Systems. (New York: John Wiley and Sons, 1976).

Pellegrin, Jean-Pierre. "Quantitative Trends in Post-Secondary Education," in Towards Mass Higher Education: Issues and Dilemmas (Paris: OECD, 1974), pp. 9-62 (1974a).

Pellegrin, Jean-Pierre. "Admission Policies in Post-Secondary Education," in Towards Mass Higher Education: Issues and Dilemmas (OECD: Paris, 1974).

Peschar, Jules. "Equal Opportunity in the Netherlands: The Influence of Social Class on Education and Occupation: An Ex-Post-Facto Study 1958-73," Sociologia Neerlandia, Vol. XI, No. 1 (1975), pp. 60-75.

Pfaff, Martin & Gerhard Fuchs with the assistance of Peter Koppl. "Education, Inequality, and Life Income: A Report on the Federal Republic of Germany," in Education, Inequality and Life Chances, Vol. 2, (Paris: OECD, 1975), pp. 7-128.

Poulantzas, Nicos. Political Power and Social Classes. (London: NLB, 1973).

Psacharopoulos, George. Earnings and Education in OECD Countries. (Paris: OECD, 1975).

Psacharopoulos, George. Returns to Education: An International Comparison. (San Francisco: Jossey-Bass, Inc., 1973).

Purves, A.C. Literature Education in Ten Countries. (New York: John Wiley and Sons, 1973).

Purves, Alan C. & Daniel U. Levine (eds.). Educational Policy and International Assessment. (Berkeley, Cal.: McCutchan Publishing Co., 1975).

Rawls, John. A Theory of Justice. (Cambridge, Mass.: The Belknap Press, 1971).

Rist, Ray C. "Student Social Class and Teacher Expectations: The Self-Fulfilling Prophecy in Ghetto Education," Harvard Educational Review (August 1970).

Schoolboys of Barbiana. Letter to a Teacher. (New York: Vintage Books, 1971).

Sen, Amartya. On Economic Inequality. (Oxford: Clarendon Press, 1973).

Sewell, William H. & Robert M. Hauser. "Causes and Consequences of Higher Education: Models of the Status Attainment Process," in W.H. Sewell, R. Hauser, and D. Featherman (eds.), Schooling and Achievement in American Society. (New York: Academic Press, Inc., 1976), pp. 9-28.

Solmon, Lewis C. & Paul Wachtel. "The Effects on Income of Type of College Attended." Sociology of Education, Vol. 48 (Winter 1975).

Tawney, R.H. Inequality. (London: George Allen and Unwin Ltd., 1931).

Thorndike, R.L. Reading Comprehension Education in Fifteen Countries. (New York: John Wiley and Sons, 1976).

Thorndike, Robert L. "The Relation of School Achievement to Differences in the Backgrounds of Children," in A. Purves and D. Levine (eds.). Educational Policy and International Assessment. (Berkeley, Cal.: McCutchan Publishing Co., 1975), Chap. 4.

Thurow, Lester. Generating Inequality. (New York: Basic Books, 1975).

Tinbergen, Jan. "Education, Inequality and Life Chances: A Report on the Netherlands," in Education, Inequality and Life Chances, Vol. 2 (Paris: OECD, 1975, pp. 404-426).

Torney, J.V., A.N. Oppenheim & F.F. Farnen, Civic Education in Ten Countries (New York: John Wiley and Sons, 1976).

Trow, Martin. "Problems in the Transition from Elite to Mass Higher Education." (Paris: OECD, 1974), pp. 51-101.

U.S. Department of Health, Education, and Welfare. Work in America (Cambridge, Mass.: The MIT Press, 1973).

Walker, David A. The IEA Six Subject Survey: An Empirical Study of Education in Twenty-One Countries. (New York: John Wiley and Sons, 1976).

Weber, Max. "On Bureaucracy," in Hans Gerth and C. Wright Mills, From Max Weber: Essays in Sociology. (New York: 1958).

Young, Michael. The Rise of the Meritocracy. (London: Thames and Hudson, 1958).